



SEQUENCE LISTING

<110> YAMASHITA, ICHIRO

<120> High estrogen-sensitive medaka fish

<130> 210217US-620-7249-0

<140> US 09/893,666

<141> 2001-06-29

<150> JP 2000-247729

<151> 2000-08-17

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<170> PatentIn version 3.1

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ccagcactca gatccaggat cagcccagcc tcttcagagc tggagaccct ctccccacct 180

cgctctctgc cccgtgaccc cctcggtgac atg tac cct gaa gag agc cgg ggt 234
Met Tyr Pro Glu Glu Ser Arg Gly
1 5

tct gga ggg gtg gct gct gtg gac ttt ttg gaa ggg acg tac gac tat 282
Ser Gly Gly Val Ala Ala Val Asp Phe Leu Glu Gly Thr Tyr Asp Tyr
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gcc gcc ccc aac cct gcc acg act ccc ctt tac agc cag tcc agc acc 330
Ala Ala Pro Asn Pro Ala Thr Thr Pro Leu Tyr Ser Gln Ser Ser Thr
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ggc tac tac tct gct ccc ctg gaa aca aac gga ccc ccc tca gaa ggc 378
Gly Tyr Tyr Ser Ala Pro Leu Glu Thr Asn Gly Pro Pro Ser Glu Gly
45 50 55

agt ctg cag tcc ctg ggc agt ggg ccg acg agc cct ctg gtg ttt gtg 426
Ser Leu Gln Ser Leu Gly Ser Gly Pro Thr Ser Pro Leu Val Phe Val
60 65 70

ccc tcc agc ccc aga ctc agt ccc ttt atg cat cca ccc agc cac cac 474

Pro	Ser	Ser	Pro	Arg	Leu	Ser	Pro	Phe	Met	His	Pro	Pro	Ser	His	His		
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gcc	tcc	agg	gag	gac	cag	tgc	ggc	tcc	cgg	gag	gac	acg	tgc	agc	ctg	570	
Ala	Ser	Arg	Glu	Asp	Gln	Cys	Gly	Ser	Arg	Glu	Asp	Thr	Cys	Ser	Leu		
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ggg	gag	tta	ggc	gcc	gga	gcc	ggg	gct	ggg	ggg	ttt	gag	atg	gcc	aaa	618	
Gly	Glu	Leu	Gly	Ala	Gly	Ala	Gly	Ala	Gly	Gly	Phe	Glu	Met	Ala	Lys		
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Ile	Gln	Gly	His	Asn	Asp	Tyr	Met	Cys	Pro	Ala	Thr	Asn	Gln	Cys	Thr		
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Cys	Tyr	Glu	Val	Gly	Met	Met	Lys	Gly	Gly	Val	Arg	Lys	Asp	Arg	Ile		
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cgc	att	tta	cgg	cgt	gac	aaa	cgg	cgg	aca	ggc	gtt	ggt	gat	gga	gac	906	
Arg	Ile	Leu	Arg	Arg	Asp	Lys	Arg	Arg	Thr	Gly	Val	Gly	Asp	Gly	Asp		
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Lys	Val	Val	Lys	Gly	Gln	Glu	His	Lys	Thr	Val	His	Tyr	Asp	Gly	Arg		
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Thr	Glu	Val	Thr	Met	Met	Thr	Leu	Leu	Thr	Ser	Met	Ala	Asp	Lys	Glu		

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Gly Pro Phe Ala Pro Ser Val Leu Gln Tyr Gly Gly Ser Arg Pro Asp	
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tgc acc ccg gcc ctt caa gac tgagcacaca gtccaaggcc ctttttttgt	1965
Cys Thr Pro Ala Leu Gln Asp	
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Thr Asn Gly Pro Pro Ser Glu Gly Ser Leu Gln Ser Leu Gly Ser Gly
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Pro Thr Ser Pro Leu Val Phe Val Pro Ser Ser Pro Arg Leu Ser Pro
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Phe Met His Pro Pro Ser His His Tyr Leu Glu Thr Thr Ser Thr Pro
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Val Tyr Arg Ser Ser His Gln Gly Ala Ser Arg Glu Asp Gln Cys Gly
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Ser Arg Glu Asp Thr Cys Ser Leu Gly Glu Leu Gly Ala Gly Ala Gly
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Ala Gly Gly Phe Glu Met Ala Lys Asp Thr Arg Phe Cys Ala Val Cys
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Ser Asp Tyr Ala Ser Gly Tyr His Tyr Gly Val Trp Ser Cys Glu Gly
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Cys Lys Ala Phe Phe Lys Arg Ser Ile Gln Gly His Asn Asp Tyr Met
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Cys Pro Ala Thr Asn Gln Cys Thr Ile Asp Arg Asn Arg Arg Lys Ser
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Cys Gln Ala Cys Arg Leu Arg Lys Cys Tyr Glu Val Gly Met Met Lys
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Gly Gly Val Arg Lys Asp Arg Ile Arg Ile Leu Arg Arg Asp Lys Arg
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Arg Thr Gly Val Gly Asp Gly Asp Lys Val Val Lys Gly Gln Glu His
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Lys Thr Val His Tyr Asp Gly Arg Lys Arg Ser Ser Thr Gly Gly Gly
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Gly Gly Gly Gly Gly Gly Arg Leu Ser Val Thr Ser Ile Pro Pro Glu

260

265

270

Gln Val Leu Leu Leu Leu Gln Gly Ala Glu Pro Pro Ile Leu Cys Ser
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Arg Gln Lys Leu Ser Arg Pro Tyr Thr Glu Val Thr Met Met Thr Leu
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Leu Thr Ser Met Ala Asp Lys Glu Leu Val His Met Ile Ala Trp Ala
 305 310 315 320

Lys Lys Leu Pro Gly Phe Leu Gln Leu Ser Leu His Asp Gln Val Leu
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Leu Leu Glu Ser Ser Trp Leu Glu Val Leu Met Ile Gly Leu Ile Trp
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Arg Ser Ile His Cys Pro Gly Lys Leu Ile Phe Ala Gln Asp Leu Ile
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Leu Asp Arg Asn Glu Gly Asp Cys Val Glu Gly Met Thr Glu Ile Phe
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Asp Met Leu Leu Ala Thr Ala Ser Arg Phe Arg Val Leu Lys Leu Lys
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Pro Glu Glu Phe Val Cys Leu Lys Ala Ile Ile Leu Leu Asn Ser Gly
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Ala Phe Ser Phe Cys Thr Gly Thr Met Glu Pro Leu His Asn Ser Ala
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Ala Val Gln Ser Met Leu Asp Thr Ile Thr Asp Ala Leu Ile His Tyr
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Ile Ser Gln Ser Gly Tyr Leu Ala Gln Glu Gln Ala Arg Arg Gln Ala
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Gln Leu Leu Leu Leu Ser His Ile Arg His Met Ser Asn Lys Gly
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Arg Ala Pro Gln Ser Leu Ser Gln Val Asp Arg Asp Pro Pro Ser Thr
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Ser Ser Gly Gly Gly Gly Ile Ala Pro Gly Ser Ile Ser Ala Ser Arg
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